

***NATIONAL WEATHER SERVICE
PRODUCT DESCRIPTION DOCUMENT (PDD)
TYPE: Experimental Product
DATE: August 04, 2003***

TROPICAL CYCLONE STRIKE PROBABILITIES GRAPHICAL

Part 1 - Mission Connection

1. Product/Service Description:

The Tropical Cyclone Strike Probabilities (SPF) graphic is an experimental product showing the probability, in percent, the center of a tropical cyclone will pass within 75 statute miles of a location during the 72 hours beginning at the time indicated in the information box. The information box also provides the name of the tropical cyclone and the advisory number from which the probabilities were generated. Contour levels shown are 10%, 20%, 50%, and 100%. This graphical product is produced by the National Hurricane Center (NHC) for tropical cyclones in the Atlantic basin. This product is also issued for subtropical storms.

2. Purpose/Intended Use:

National Weather Service (NWS) customer feedback indicates a desire for products in a graphical format. Through this experimental time, June 1 - November 30, 2003, the intent is to receive input from various users of the product and whether the information contained is of any benefit or use.

3. Audience:

This product is widely used by NWS National Centers and WFOs; other federal, state, and local government agencies; federal, state, and local emergency managers; maritime interests; the media and the public.

4. Presentation Format:

This is a graphical product in Graphics Interchange Format (GIF).

5. Feedback Method:

The NWS Customer Survey for Experimental Products/Services (OMB Control Number 0648-0342) should be used. The survey and survey instructions are located at:

<http://products.weather.gov/Survey.txt>.

The experimental feedback period will run from June 1, 2003 through November 30, 2003.

Technical and policy questions and comments for the experimental graphical SPF may be directed to:

National Weather Service
Attn: Scott Kiser, W/OS21
Tropical Cyclone Program Manager
1325 East-West Highway, Room 13126
Silver Spring, MD 20910-3285

or e-mail questions and comments to: Scott.Kiser@noaa.gov.

Part 2 - Technical

1. **Format and Science Basis:**

Probabilities are derived by using a historical database of all previous storms whose location and forecast are similar to the storm for whom probabilities are being created. By comparing where similar storms tracked, probabilities can be derived based on the likely errors in the official forecast. Details of the derivation of probabilities can be found in the publication: Probability of Hurricane/Tropical Storm Conditions: A Users Guide for Local Decision Makers.

2. **Availability:**

The graphical SPF is produced by hurricane forecasters for every advisory except when the advisory indicates the cyclone has dissipated and hence there is no track forecast. The product is disseminated at 0300, 0900, 1500, and 2100 Coordinated Universal Time (UTC) with valid position times corresponding to the advisory time. Since this product is produced only when there are tropical cyclones, an example is available at

http://www.nhc.noaa.gov/graphics_astorm1.shtml. During times of tropical cyclones, the product is available via the Internet at <http://www.nhc.noaa.gov> under “Active Tropical Systems” link.

3. **Additional Information:** N/A